February 17, 2009

MEMORANDUM

TO: Mike Volesky, Governor's Natural Resource Policy Advisor
FR: Tommy Butler, Trust Lands Attorney, DNRC
RE: Legislative declaration of State ownership of geologic "pore space" in HB 502

A review of Montana law reveals that ownership of "pore space" for the storage of carbon dioxide in geologic strata is an unresolved legal question. There is no case law on the ownership of such space for lands possessing a severed mineral estate. Where such legal uncertainty exists, the legislature has previously sought to resolve similar property title questions; most recently in 1993 when the Montana legislature clarified the ownership of coal bed methane by enacting the legal definitions of "coal" and "gas" in Section 82-1-111, MCA. This previous legislation helped promote the development of coal-bed methane by clarifying the title to that gas.

HB 502 declares that the State of Montana is the ownership of "pore space" within all lands, except federal or tribal lands. This legislative declaration of State ownership of this resource is based upon the theory of the public trust doctrine - the legal principle that certain resources are preserved for public use and that government must maintain it for the public good. See, Sax, Joseph L, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention", 68 Michigan Law Review 471 (1970).

Several state courts have held that the public trust doctrine exists independently of any statutory declarations. *See, e.g.,* National Audubon Soc'y v. Superior Ct. Of Alpine Cty., 33 Cal.3d 419, 189 Cal.Rptr. 346, 658 P.2d 709, 728 n. 27 (1983.) ("Aside from the possibility that statutory protections can be repealed, the noncodified public trust doctrine remains important both to confirm the state's sovereign supervision and to require consideration of public trust uses in cases filed directly in the courts ...."), *cert. denied,* 464 U.S. 977, 104 S.Ct. 413, 78 L.Ed.2d 351 (1983); Kootenai Envtl. Alliance v. Panhandle Yacht Club, Inc., 105 Idaho 622, 671 P.2d 1085, 1095 (1983) ("[M]ere compliance by [agencies] with their legislative authority is not sufficient to determine if their actions comport with the requirements of the public trust doctrine. The public trust doctrine at all times forms the outer boundaries of permissible government action with respect to public trust resources."). San Carlos Apache Tribe v. Superior Court ex rel. Maricopa County, 193 Ariz. 195, 972 P.2d 179, 199 (1999)("The public trust doctrine is a constitutional limitation on legislative power.... The Legislature cannot order the courts to make the doctrine inapplicable to these or any proceedings.").

Consequently, the public trust doctrine has been applied to a variety of natural resources, including:

Stream Access

The doctrine has been applied in the context of stream access. In the legal cases applying the doctrine to stream access, it appears that the Montana Supreme Court

recognized that the doctrine did not take precedence over the prior appropriataion doctrine and water rights. See Galt v. State by and through Dept. of Fish, Wildlife and parks, (1987), 225 Mont. 142, 731 P.2d 912; Montana Coalition for Stream Access, Inc. v. Hildreth (1984) 211 Mont. 29, 684 P.2d 163;

Navigable Waters

Illinois Central R.R. Co. v. Illinois, 146 U.S. 387, 13 S.Ct. 110, 36 L.Ed. 1018 (1892); Weden v. San Juan County, 958 P.2d 273, 284 (Wash., 1998) (doctrine regulates personal watercraft on state waters); Vander Bloemen v. Wisc. Dep't of Nat. Res., No. 95-1761,1996 WL 346266 (Wis. Ct. App. 1996) (doctrine protects lakeside ecology);

Fish

People v. Truckee Lumber Co., 116 Cal. at pp. 400-401, 48 P. 374 ("The dominion of the state for the purposes of protecting its sovereign rights in the fish within its waters, and their preservation for the common enjoyment of its citizens, is not confined within the narrow limits suggested by defendant's argument. It is not restricted to their protection only when found within what may in strictness be held to be navigable or otherwise public waters."); Selkirk-Priest Basin Ass'n, Inc. v. Idaho ex rel. Andrus, 899 P.2d 949 (Idaho, 1995) (doctrine allows challenge to land management action where that sedimentation could injure fish spawning grounds); Pullen v. Ulmer, 923 P.2d 54 (Alaska, 1996) (doctrine covers fish in their natural state);

Wildlife

Geer v. Connecticut, 161 U.S. 519, 527, 529, 16 S.Ct. 600, 40 L.Ed. 793 (1896); overruled in *Hughes v. Oklahoma* (1979) 441 U.S. 322, 99 S.Ct. 1727, 60 L.Ed.2d 250.), wherein the Court held that:

> Whilst the fundamental principles upon which the common property in game rests have undergone no change, the development of free institutions has led to the recognition of the fact that the power or control lodged in the State, resulting from this common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of the people, and not as a prerogative for the advantage of the government, as distinct from the people, or for the benefit of private individuals as distinguished from the public good. Therefore, for the purpose of exercising this power, the State ... represents its people, and the ownership is that of the people in their united sovereignty.

Geer v. Connecticut, *supra,* 161 U.S. at p. 529, 16 S.Ct. 600;

Public Parks

Friends of Van Cortland Park v. City of New York, 750 N.Y.2d 1050 (N.Y. 2001) (doctrine covers public parks);

Groundwater

In re Water Use Permit Applications, 9 P.3d 409 (Haw., 2000) (doctrine covers groundwater); and

Aquifers or geologic strata

Several Courts have previously recognized public storage rights in geologic strata. In Board of County Commissioners of County of Park v. Park County Sportsmen's Ranch, 45 P.3d 693 (Colo., 2002), private land owners brought a declaratory judgment action seeking a determination that a rancher had no right to artificially recharge and store water in aquifers underlying their private land without the landowners' permission. Id. at 700, 703. The Colorado Supreme Court held that the rancher had no obligation to seek the landowners' permission or to pay just compensation because a recharge of an aquifer does not constitute a trespass. Id. at 706-07. See also, Chance v. BP Chems., Inc., 77 Ohio St.3d 17, 670 N.E.2d 985, 992-94 (1996) (rejecting a trespass claim based upon absolute ownership of water and migration of liquid injected into the aquifer.); South West Sand & Gravel, Inc. v. Central Arizona Water Conservation Dist., 2008 WL 4837693, 4 (Ariz.App. Div. 1) (Ariz.App. Div. 1,2008)

The public trust doctrine has been evolved beyond its traditional common law emphasis on commerce, navigation, and fisheries, and has been recognized as "sufficiently flexible to encompass changing public needs" [Marks v. Whitney, 6 Cal.3d 251 at 259, 491 P.2d 374 at 380, 98 Cal.Rptr. 790 at 796 (Cal., 1971)] such as concern for the environment, expanding recreational uses, and aesthetic preservation. National Audubon Society v. Superior Court, 33 Cal.3d 419, 434-435, 189 Cal.Rptr. 346, 658 P.2d 709 (Cal., 1983); City of Berkeley v. Superior Court, 26 Cal.3d 515, 521, 162 Cal.Rptr. 327, 606 P.2d 362 (Cal., 1980)

Some may question whether the State possesses the clear authority to declare public trust ownership of geologic pore space by citing Section 70-16-101, MCA. This statute reflects the old common law view that a private land owner owns all the rights in its property above and below it. (The latin phrase is Cuius est solum, eius est usque ad coelum et ad inferos".) Translated as: "For whoever owns the soil, it is theirs up to the sky and down to the depths". The U.S. Supreme Court has been critical of this historic principle of property law, stating in United States v. Causby, 328 U.S. 256 (1946) that this ancient common law doctrine had no legal effect "in the modern world." A property right is nothing more than the right to exclusive use of property and the right to exclude others.

In U.S. v. Causby, a property owner sought damages from the United States for trespassing across his "air-space". Military aircraft from a local airbase were frightening his chickens. Fly-bys from the local airbase caused his chickens to fly into walls and die. Causby wanted to enforce his right to what he thought was his exclusively-owned airspace above his property. Although, the U.S. Supreme Court recognized a constitutional taking of Causby's property rights, it did so because the Air Force conceded on oral argument that if the flights rendered the property uninhabitable, a taking would have occurred. However, Justice Douglas, in writing this opinion for the Court held that:

> It is ancient doctrine that at common law ownership of the land extended to the periphery of the universe-Cujus est solum ejus est usque ad coelum. But that doctrine has no place in the modern world. The air is a public highway, as Congress has declared. Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea. To recognize such private claims to the airspace would clog these highways, seriously interfere with their control and development in the public interest, and transfer into private ownership that to which only the public has a just claim.

U.S. v. Causby, 328 U.S. 256, 260-261, 66 S.Ct. 1062, 1065 (U.S. 1946)

There are two important points derived from U.S. v. Causeby: 1) the U.S. Supreme Court has recognized that property rights are not absolute (Instead, private property rights are qualified by the extent of public rights.); and 2) Congress could validly declare airspace as a public resource.

Most western states recognize a common public right to transport irrigation water in natural water courses - because it is a common public right maintained by the State. This bill would recognize a similar common public right for the storage of Carbon Dioxide in empty geologic strata. A land owner's title to property is subject to pre-existing limitations arising from the state's reservation of public resources. Landowners whose properties border a natural watercourse or lie over an aquifer cannot maintain an action for trespass or a taking arising out of public use of public resources. If several Courts have recognized that the storage of water under private land does not constitute a taking, it is likely that the storage of Carbon Dioxide does not constitute a taking either.

Because of the absence of Montana case law on this subject, it is entirely possible that the legal rationale that I have set out in this memorandum in support of HB 502 may prove to be incorrect. See, Bell v. Town of Wells, 557A.2d168, 179 (Me.,1989) (A state, under the guise of interpreting its common law, cannot sanction a physical invasion of the property of another.) However, where legal uncertainty exists, the responsibility ultimately falls to the legislature and to our courts to clarify those legal rights and relationships. HB 502 will initiate the process to determine the ownership of "pore space" in geologic formations in Montana. The Legislature clearly has the authority to codify the common law, and declare the nature and extent of its public trust properties. See, Phillips Petroleum Co. v. Mississippi, 484 U.S. 469, 475 (1988)

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February 23, 2009

Representative Mike Phillips
9 W. Arnold St.
Bozeman, Montana 59715

Dear Representative Phillips:

I am writing in response to your request for analysis of the ownership of "pore space" in Montana. This letter constitutes my analysis.

There is no definition of "pore space" in Montana law. In law, words are construed according to their plain meaning and resorting to a dictionary definition is appropriate. See Richter v. Rose, 1998 MT 165, 289 Mont. 379, 962 P. 2d 583 (1998). Webster's New World College Dictionary, 4th edition (2001), defines "pore" as a "passage or channel; a tiny opening, usually microscopic, as in plant leaves or skin, through which fluids may be absorbed or discharged; *a similar opening in rock or other substances*". (emphasis supplied) Webster's defines "space" in this context as "the distance, expanse, or area between, over, within, etc. things". Section 34-1-152 of the Wyoming Statutes Annotated defines "pore space" as "subsurface space which can be used as storage space for carbon dioxide or other substances", and that section also provides that the ownership of the pore space is vested in the several owners of the surface above the strata.

Section 1-1-108, MCA, provides that in this state there is no common law in any case where the law is declared by statute. However, where the law is not declared by statute, if the common law is applicable and of a general nature and not in conflict with the statutes, the common law is the law and rule of decision. The common law maxim "cujus est solum, ejus est usque ad coelum et ad infernos" is defined in Black's Law Dictionary, 6th edition, as "To whomever the soil belongs, he owns also to the sky and to the depths. The owner of a piece of land owns everything above and below it to an indefinite extent." This maxim is often used in connection with the concept of fee title ownership of property. This common law maxim has been rejected with regard to air space. See United States v. Causby, 328 U.S. 256 (1946), in which the United States Supreme Court stated that the concept of ownership to the edge of the universe had no place in the modern world in which the air is a public highway, as declared by Congress. If that were not true, every transcontinental flight would subject the operator to countless trespass suits. However, see Silver Bow County v. Hafer, 166 Mont. 330, 532 P.2d 691 (1975), in which the Montana Supreme Court relied upon the premise that "a condemning authority may not acquire a greater interest or estate in the condemned property than the public use requires" to find that when a flight path easement to ensure safe flight would adequately serve public need, it was not necessary for the county to acquire a fee simple title. However, the concept is still valid with respect to subterranean rights. I will elucidate on the validity of the concept.

Section 70-15-101, MCA, defines "real property" as consisting of "(1) land; (2) that which is affixed to land; (3) that which is incidental or appurtenant to land; (4) that which is immovable

by law". Section 70-15-102, MCA, defines "land" as "the solid material of the earth, whatever may be the ingredients of which it is composed, whether soil, rock, or other substance". Section 70-15-203, MCA, in describing "fee simple" states "Every estate of inheritance is a fee, and such estate, when not defeasible or conditional, is a fee simple or an absolute fee." In Gantt v. Harper, 82 Mont. 393, 404, 267 P. 296 (1928), the Montana Supreme Court described a "fee simple title" as the largest estate known to the law and as standing at the head of estates as the highest in dignity and the most ample in extent. Therefore, under Montana law, the owner of a fee simple title to land would own the pore space under the surface of the land.

Although Montana does not define "pore space", Montana law recognizes the existence of pore space and the ownership of pore space as private property. Section 70-30-101, MCA, defines "eminent domain" as " the right of the state to take private property for public use". This definition has been in Montana law since 1877. Section 70-30-102(43), MCA, includes as a "public use" underground reservoirs suitable for storage of natural gas. Section 70-30-105, MCA, concerning the taking of an underground reservoir for the storage of natural gas provides:

> (1) The taking of any sand, stratum, or formation for use as an underground natural gas storage reservoir is without prejudice to the rights of the owner or owners of the land or of the oil, gas, or other mineral rights in the land to drill or bore through the sand, stratum, or formation taken for use as an underground natural gas storage reservoir in order to explore for, produce, process, treat, or market any oil, gas, or other minerals that might be contained in the land above or below the sand, stratum, or formation taken.
>
> (2) Any additional cost or expense required to be incurred in order to protect the underground natural gas storage reservoir against pollution and the escape of the gas from the reservoir by reason of boring or drilling through the sand, stratum, or formation used as an underground natural gas storage reservoir must be paid by the persons, firm, or corporation owning the underground natural gas storage reservoir at the time of the boring or drilling.

The provisions of Montana law addressing underground reservoirs for the storage of natural gas were enacted in 1953. Obviously, the underground natural gas storage reservoir would fall within the plain meaning of "pore space". Section 70-30-105, MCA, recognizes that in Montana the ownership of the mineral estate may be severed from the surface estate.

In McDonald v. Unirex, Inc., 221 Mont. 156, 158, 718 P.2d 316 (1986), the Montana Supreme Court cited Stokes v. Tutvet, 134 Mont. 250, 328 P.2d 1096 (1958), as establishing a list of basic, well-established rules in the field of oil and gas conveyancing. The list included the following: (1) Montana is an ownership-in-place state with regard to oil, gas, and other minerals; (2) title to the mineral interest in land may be separated from the rest of the fee simple title; and (3) under a mineral deed conveyance, the grantee receives, among other incidents, the right to go upon the land and explore for and produce oil and gas.

The title to mineral interests in land, including oil, gas, and coal interests, may be segregated in whole or in part from the rest of the fee simple title, and there is little doubt that those interests may be separately conveyed. Lien v. Simons, 522 F. Supp. 712, 38 St. Rep. 1644 (D.C. Mont. 1981). See also sections 77-2-304 and 77-2-327, MCA, requiring the state to reserve the mineral estate from the sale of state land. The owner of the mineral estate enjoys the dominant estate, and the surface owner of the remaining estate holds the subservient estate. This theory is based upon the realities that accompany mineral exploration and development. Obviously in order to fully use a mineral estate, a person must have access to the surface. Hunter v. Rosebud County, 240 Mont 194, 198, 783 P.2d 927 (1989). See also Western Energy Co. v. Genie Land Co., 227 Mont. 74, 737 P.2d 478 (1987). The severance of the mineral estate from the surface estate adds a complicating factor to a determination of pore space ownership because the conveyance of the mineral estate separate from the surface estate creates a unique subsurface ownership interest.

I am unaware of any reported Montana decisions involving a dispute between the surface owner and the mineral owner with respect to the ownership of an underground natural gas storage reservoir. However, there are cases in other jurisdictions with conflicting results. In Emeny v. United States, 188 Ct. Cl. 1024, 412 F.2d 1319 (1969), the Court of Claims examined the documents creating the severed oil and gas estates and concluded that the title to an underground dome in Texas proposed to be used to store helium and helium-gas mixtures resided in the surface owner rather than the mineral estate owner. In Mapco, Inc. v. Carter, 808 S.W.2d 262 (Tex. App. 1991), the title to a salt dome formation created by the removal of salt and proposed to be used for the storage of oil and natural gas was found to reside in the owner of the mineral estate. Salt is considered a mineral under Texas law. These cases indicate that where the mineral estate has been severed from the surface estate, the conveyancing documents and the material comprising the walls of the "pore space" may play a role in determining ownership of the "pore space".

You have also asked how the pore space can be utilized if the pore space underlies multiple tracts with different ownership. As discussed earlier, the ability to condemn an underground reservoir for the storage of natural gas provides a means for consolidating ownership of the underground reservoir in a single owner. In addition, oil and gas law has long recognized the use of pooling arrangements to allocate production among the owners of different tracts. See sections 82-10-202, 82-11-104, 82-11-202, and 82-11-203, MCA.

The failure to address the use of eminent domain with regard to the use of pore space for the storage of carbon dioxide presents an additional potential problem. In Montana, private property may be taken only for a public use pursuant to Article II, section 29, of the Montana Constitution. The public uses for which property may be taken are enumerated in section 70-30-102, MCA. The failure to include the underground storage of carbon dioxide as a public use would allow condemnation of pore space used to store carbon dioxide for the purpose of storing natural gas, which is an enumerated public use as discussed earlier. The resulting displacement of the stored carbon dioxide would be very problematic. If the underground storage of carbon dioxide was

included as a permissible public use, then in order to condemn the space for the storage of natural gas, the condemnor would be required to show that the storage of natural gas was "more necessary" than the storage of the carbon dioxide. See sections 70-30-103 and 70-30-111, MCA, and City of Missoula v. Mountain Water Company, 228 Mont. 404, 743 P.2d 590 (1987).

It has been suggested that the state could claim ownership of "pore space" under the public trust doctrine. The public trust doctrine, which dates to the Institutes of Justinian in 533 A.D., provides that certain naturally occurring phenomena are common to all. In the United States, the doctrine originally applied to governmental ownership of land underlying navigable waters. See Arnold v. Mundy, 6 N.J.L. 1 (Sup. Ct. 1821). The states, other than the original 13 states, entered the Union on an "equal footing", and these states also succeeded to the ownership of the lands underlying the navigable waters. Pollard's Lessee v. Hagan, 44 U.S. 212 (1845). The doctrine has also been expanded to nonnavigable waters. See National Audubon Society v. Superior Court of Alpine County, 658 P.2d 709 (Cal. 1983). The title to the public asset is held in trust for the people of the state. The control of the state can never be lost except as can be disposed of in promoting the public interest and without substantial impairment of the public interest. It is difficult to conceive how "pore space" underlying privately owned real property could be conceived of as a naturally occurring phenomena common to all. A great deal of "pore space" is created by the removal of oil and gas or other minerals from the real property, so the pore space would not be naturally occurring. In addition, because of the recognition of fee simple title to real property and the recognition of severed interests in real property, including "underground reservoirs", as privately owned interests in real property, there does not appear to any basis for application of the public trust doctrine to "pore space".

In summary, there is no basis under Montana law for claiming that the ownership of the "pore space" underlying the surface of the land is vested in the state of Montana. Proclaiming the ownership of pore space in the state would be a taking of private property of monumental proportions. With regard to land for which title is held in fee simple, the title to the "pore space" is vested in the owner of the land. If the ownership of the mineral estate has been severed from the surface ownership, additional information including the language of the severance documents and the geologic makeup of the structure creating the pore space may be complicating factors.

I hope that I have adequately addressed your questions. If you have other questions or if I can provide additional information, please feel free to contact me.

Sincerely,

Gregory J. Petesch
Director of Legal Services

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